

What is claimed is:

1. A method for producing a tertiary butyl alcohol from isobutylene and water in the presence of a cation-exchange resin catalyst and at least one solvent selected from the group consisting of sulfones and organic carboxylic acids by using a catalytic distillation apparatus.
2. The method for producing a tertiary butyl alcohol according to claim 1, wherein the solvent is sulfolane, dimethyl sulfone or acetic acid.
3. The method for producing a tertiary butyl alcohol according to claim 1, wherein the amount of solvent is 0.01 mole or more to 1 mole of isobutylene.
4. The method for producing a tertiary butyl alcohol according to claim 1, wherein the cation-exchange resin is polystyrenesulfonic acid resin, phenolsulfonic acid resin or perfluorosulfonic acid resin.
5. The method for producing a tertiary butyl alcohol according to claim 1, wherein the cation-exchange resin is a porous cation-exchange resin.